

USAWC STRATEGY RESEARCH PROJECT

THE ARMY PREPOSITIONING STOCKS
PROGRAM: "ARE WE THERE YET?"

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ABSTRACT

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As the Army and the military transform to meet future challenges and missions, multiple changes are taking place to ensure that support across all spectrums of conflict is more effective and efficient leaving a reduced logistics footprint. We must develop and implement new joint doctrine based on a distribution-based logistics system that delivers combat power with uninterrupted momentum. The United States is a power projection nation, and rapid power projection alone provides deterrence. We must have enablers in Army Prepositioned Stocks or ensure the early arrival of the enablers to conduct effective operations. This Strategic Research Project examines the effectiveness of The Army Prepositioned Stocks Program as a combat multiplier and offers insights into possible future concepts as we transform the force.

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**THE ARMY PREPOSITIONING STOCKS PROGRAM:
"ARE WE THERE YET?"**

"We are more and more an expeditionary force; strategic air and sealift, complemented by our pre-positioning initiatives, must be our number one priority."

—General John M. Shalikashvili, Chairman
Joint Chiefs of Staff, 1995

THESIS AND METHODOLOGY

The Army's Prepositioned Stocks Program performs a key role in the nation's power projection strategy, and credible power projection alone provides deterrence. The Army's standard for deployment overseas is 96 hours to project the first brigade, 120 hours to project the first division, and 30 days to project five full divisions. To support rapid deployment, one of the cornerstones of American defense policy has been forward-based prepositioned stocks of vehicles and equipment in friendly nations. The concept of force projection and prepositioning, coupled with strategic airlift greatly reduces force closure time in response to critical events overseas. This Strategy Research Project (SRP) examines the effectiveness of the Army Prepositioned Stocks Program as a combat multiplier. It will review the mobility triad – airlift, sealift and prepositioning - and offer insights into possible future concepts as we transform the force.

BACKGROUND

The 1992 Department of Defense (DOD) Mobility Requirements Study (MRS) identified the forces the U.S. would need to fight two major regional conflicts in quick succession. The Joint Chiefs of Staff (JCS) proposed new airlift and sealift forces, recommending that the Army preposition sets of heavy equipment on board ships staged close to potential areas of concern. This study revealed that neither our current nor our future ability to strategically project power proved adequate to meet the demands of the 1992 National Security Strategy.¹ To address the MRS, the Army initiated the Army Strategic Mobility Program (ASMP), which called for prepositioning equipment and Combat Support (CS) and Combat Service Support (CSS) unit's onboard ships in the Indian Ocean so they could be delivered to either the Persian Gulf or the Korean Peninsula within 15 days. Surge sealift ships would transport heavy divisions from the continental United States to reinforce operations within 30 days. The ASMP validated the need

for additional sealift and preposition afloat ships, the C-17 cargo aircraft, and upgrades of all CONUS-based elements necessary to move forces to air and seaports.²

Although the Army did not have prepositioned brigade sets in the Persian Gulf before Operation Desert Shield/Desert Storm, it did have a prepositioning fleet consisting of four ships used primarily for transporting ammunition and port handling equipment. The U.S. military strategy relies on the twin concepts of forward presence and power projection to facilitate accomplishment of military objectives. The National Military Strategy (NMS) defines Overseas Presence as “the strategic placement of permanently stationed, rotationally and temporarily deployed U.S. military forces overseas, and the infrastructure and prepositioned equipment necessary to sustain them in and near key regions.”³

Complementing overseas presence, power projection enables U.S. forces to apply all necessary elements of national power at the place and time necessary to achieve national security objectives. Credible power projection requires the capability to rapidly deploy military forces sufficiently robust to prosecute and terminate conflicts on terms favorable to the U.S. and its allies.⁴

ARMY PREPOSITIONING STOCKS (APS) BEGINNINGS: EVOLUTION FROM THE EARLY YEARS

The APS Program was designed partially in response to events at the conclusion of the Cold War. The end of the U. S. - Soviet conflict led to a downsizing in U.S. military personnel, along with a policy to keep more American troops at home. Still, with regional conflicts on the horizon, Army leaders wanted a way to quickly deploy forces and equipment to meet emerging crisis. At the same time, the U.S. has undertaken a multitude of peacekeeping and humanitarian missions around the world. To accomplish these varied missions, the Army has become increasingly CONUS-based but with greater power projection capabilities.

Operation Desert Storm in 1991 demonstrated the value of prepositioned equipment as well as its challenges. The Army moved large quantities of equipment from Europe and ammunition stocks from three ships into the Gulf, but there was no clear chain of command to approve the transfers from one region to another. Often the issue was left to the discretion of regional commanders. One of the major lessons learned from this experience was the need to preposition equipment to support the deployment of heavy forces. Following the Gulf War, the JCS, concerned about the long time it took to deliver heavy forces and associated logistical support, concluded that “limitations in mobility forces had imposed considerable risk.”⁵

POWER PROJECTION STRATEGY

The only viable alternative to our current strategy of power projection is extensive forward deployment. We can never know with certainty where or when the next conflict will occur or who our next adversary will be.⁶ The strategic environment makes it unclear where, or when, or for what strategic purposes U.S. ground forces will find themselves committed to battle in the coming decades.⁷ Our current doctrine is based on the initial strategic mobility requirements specified in the 1995 Mobility Requirements Study Bottom-Up Review. It calls for placing the lead Brigade on the ground by C+4, the lead Division by C+12, two heavy Divisions by C+30, and the full Corps (five Divisions and a COSCOM) by C+75. The success of our power projection strategy depends on not just the speed with which combat power can be assembled, but also on how quickly it can be deployed on the battlefield. All large scale deployments consist of three distinct and interrelated segments: fort to port, port to port, and port to foxhole.⁸

The Army has designated CONUS bases from which assigned forces deploy as “Power Projection Platforms.” These key bases are equipped with expanded and modernized loading and cargo handling facilities for rapid transport of military forces and equipment to designated ports of embarkation. These modern power projection platforms enable our strategic mobility triad of (strategic airlift, strategic sealift, and prepositioned equipment) to operate at peak efficiency. The strategic mobility triad provides the capability to meet force projection timelines. Historically, 10 percent of material sent to a theater arrives via airlift, while the remaining 90 percent arrives via sealift.⁹

There are two types of prepositioning in the triad: prepositioning ashore (APS-1/2/4/5) and prepositioning afloat (APS-3). Prepositioning plays a critical role in rapidly equipping forces deploying to major theaters of war and to smaller scale contingencies. Prepositioning ashore allows heavy equipment to be kept in-theater, near the point at which it will be needed.¹⁰ Prepositioning afloat allows for forward prepositioning of sustainment stocks, unit equipment, and port opening capabilities on Military Sealift Command (MSC) vessels based in Diego Garcia and Guam. These vessels can cruise worldwide in response to any contingency. Together, these assets enhance force projection by allowing CONUS-deployed personnel to be equipped with in-theater stockpiles, which reduce the need for heavy-lift assets during the critical “Early Entry” phase.

AIRLIFT

Airlift can move forces rapidly from CONUS to any theater, but it is an expensive and inefficient means of moving bulk goods and heavy equipment. It is best suited for the transport

of light, early-entry forces, or for the movement of troops falling in on prepositioned stocks or equipment transported by sea.¹¹ As the Army began to review operations in Afghanistan, it determined that "Army tactical and Air Force strategic lift platforms strained to meet demands imposed by the threat, the environment and the magnitude of this global effort. Demand for the capabilities of the CH/MH-47 and C-17 and their respective utility in GWOT (Global War on Terrorism) warrant reconsideration of program funding levels."¹²

SEALIFT

MSC is responsible for four major programs, one of which is the prepositioning program. MSC Prepositioning Program operates 36 at sea ships with two in Reduced Operating Status to support DOD and the Navy's and Marine Corp's Sea Power 21 strategy.¹³ These ships are pre-loaded with military equipment and supplies. They are strategically positioned in key ocean areas, facilitating early arrival of equipment vital to initial support of forward deploying military forces. Prepositioning ships are sub-divided into three categories, based on the U.S. military customers they support:

- Combat Prepositioning force supporting the Army
- Maritime Prepositioning supporting the Marine Corps
- Logistics Prepositioning supporting the Navy, Air Force, and the Defense Logistics Agency.

PREPOSITIONING

APS is owned by Headquarters, Department of the Army (DA) and is not linked to Army Combatant Commanders (COCOMs) or specific regional commanders or theaters. The only land-based stocks were maintained in Europe for almost 30 years prior to the end of the Cold War, known as POMCUS (pre-positioning of materiel configured to unit sets). These prepositioned sets facilitated deployments of U.S. units to Europe, where they drew their equipment and participated in Return of Forces to Germany (REFORGER) exercises. The land-based Army prepositioned stocks adequately support the early deployment of a heavy brigade in Europe, Southwest Asia, and Korea by C+4. APS are protected go-to-war assets; they will not be used to improve peacetime readiness or fill unit shortages.¹⁴

Headquarters, Department of the Army must approve all issues and loans of APS. These prepositioned sets of equipment are essential to the timely support of the U.S. NMS. Effective 1 October 1993, DA directed The Army Materiel Command (AMC) to assume responsibility for the Army War Reserve (AWR) Program to provide central management of war reserve stocks. The APS program encompasses prepositioned brigade sets, operational project stocks,

sustainment stocks, and War Reserve Stocks for Allies (WRSA). WRSA is directed by the Office of the Secretary of Defense to ensure U.S. preparedness to assist designated allies in case of war. WRSA assets are prepositioned in appropriate theaters and owned and financed by the U.S. They are released to the proper Army component commander for transfer to the supported allied force under the Foreign Assistance Act upon a declaration of defense condition 2, and under existing country-to-country memorandums of agreement.

The AWRs stocks are divided into five general geographic areas. In 2003 AMC stood up Army Field Support Command (AFSC) as a Major Subordinate Command to manage the Army's Global Prepositioning Strategy in support of deploying forces.¹⁵ AMC's various MSC's managed the procurement and distribution of APS equipment and secondary items of supply, while AFSC managed the storage and handoff of stocks at the APS sites, which were aligned as follows:

APS-1 – CONUS (Land):

APS and prepositioned materiel (end items, secondary items, and supplies) stored in unit sets to reduce force deployment time and Operational Projects (APSOP, i.e. Mortuary Affairs and Enemy Prisoner of War); APS provide materiel above normal Tables of Organizational Equipment (TOEs), Tables of Distribution and Allowances (TDAs), and Common Tables of Allowances (CTAs) authorizations tailored to provide key strategic capabilities essential to the Army's ability to execute its Force Projection Strategy.¹⁶

APS-2 – EUROPE/Central Region 1 (Land):

A sub-element of APS that consists of force projection packages for two Armored Battalions and one Infantry Battalion (Mech) stored in unit sets to reduce force deployment time. The operation is based on the concept of airlifting personnel from an Army heavy brigade and its support elements into a theater to link-up with its equipment and supplies at the Prepositioned land site.¹⁷

APS-2 – EUROPE/Central Region 2 (Land):

A sub-element of APS that consists of force projection packages for two Armored Battalions and one Infantry Battalion (Mech) stored in unit sets to reduce force deployment time. The operation is based on the concept of airlifting personnel from an Army heavy brigade and its support elements into a theater to link-up with its equipment and supplies at the prepositioned land site.¹⁸

APS-2 – EUROPE/ITALY (Land):

A sub-element of APS that consists of two Armored Battalions and two Infantry Battalion (Mech) force projection packages, stored in unit sets to reduced force deployment time. The operation is based on the concept of airlifting personnel from an Army heavy brigade and its support elements into a theater to link-up with its equipment and supplies at the prepositioned land site.¹⁹

APS-3 – GULF/Diego Garcia (Afloat):

APS-3 is a sub-element of APS. It consists of force projection package that can be repositioned quickly in response to a crisis anywhere in the world. The APS-3 operation is based on the concept of airlifting personnel from an Army Heavy Brigade and its support elements into a theater to link-up with its equipment and supplies prepositioned aboard APS-3 ships. Its mission is to project a heavy Brigade force into theater for a crisis, rapidly reinforce the lodgment, open the ports for follow-on forces, protect key objectives, and support other military operations. An APS-3 is global in range, joint in character, and suitable for employment in a variety of situations.

The APS-3 fleet consists of categories of equipment tailored to meet specific Combatant Commanders, geographical, or common-user requirements. It has sufficient equipment on board to equip and sustain: a heavy brigade with two Armored and two Mechanized Infantry Battalions (Mech), a Division slice of CS/CSS units, a Corps Support Group, a Composite Transportation Group, and miscellaneous equipment designated to support port opening and the establishment of the Reception, Staging, and Onward Movement operations, with 30 days sustainment supplies. An APS force may employ its basic package in support of a humanitarian mission or all of its capability to support a major theater war.

Fifteen (15) ships in the current APS-3 fleet carry the equipment for the combat brigade and its support elements, including sustainment stocks and ammunition for a contingency corps of five and a third (5 1/3) divisions. Currently, three (3) Lighter Aboard Ships (LASH), two (2) Heavy Lift Preposition Ship (HLPS), two (2) Container Ships, one (1) "T" Class Auxiliary Crane Ship (T-ACS) and seven (7) Large-Medium Speed Roll on/Roll off (LMSR) make up the APS-3 fleet. The three LASH ships currently in the fleet (GREEN HARBOUR, GREEN VALLEY, and the JEB STUART) are carrying barges and containers with Class 1, Class II, CLASS III (P), CLASS V, CLASS VIII, Reverse Osmosis Water Purification Unit (ROWPU), and an Inland Petroleum Distribution System (IPDS). The general cargo onboard the LASH is currently in the process of being trans-loaded onto converted container ships, thereafter, it will only carry Class

V. This will allow greater flexibility for rapid reception of critical Class V assets in theater. Upon completion of the trans-loads, the LASH ships will return to the Ready Reserve Fleet.

The AMERICAN CORMORANT and the STRONG VIRGINIAN are HLPS. These ships are carrying Army watercraft and Materiel Handling Equipment (MHE) for port opening operations. The SS GOPHER STATE is a self-sustaining Military Sealift Command (T-ACS) Class Auxiliary Crane Ship. Its mission is to off-load containers and other outsized cargo from non self-sustaining cargo ships offshore, or at bare or underdeveloped ports. The MV LTC TITUS and the MV SPC GIBSON are container ships; both ships have two cranes, 60 each 220v reefer container locations with a total TEU capacity of 1672 and 45K square feet of space for RO/RO equipment.

The seven LMSRs are the GORDON, SHUGART, YANO, GILLILAND, WATSON, CAPE DOUGLAS and BOB HOPE; they carry the bulk of heavy Brigade's equipment.²⁰

APS-4 – KOREA (Land):

A sub-element of APS that consists of force projection packages for two Armored Battalions and one Infantry Battalion (Mech) stored in unit sets to reduce force deployment time. The operation is based on the concept of airlifting personnel from an Army heavy Brigade and its support elements into a theater to link-up with its equipment and supplies at the prepositioned land site.²¹

APS-5 – SOUTHWEST Asia/Qatar (Land):

A sub-element of APS that consists of force projection packages for two Armored Battalions and two Infantry Battalion (Mech) stored in unit sets to reduce force deployment time. The operation is based on the concept of airlifting personnel from the Army heavy Brigade and its support elements into a theater to link-up with its equipment and supplies at the prepositioned land site.

APS-5 –SOUTHWEST Asia/Kuwait (Land):

A sub-element of APS that consists of force projection packages for two Armored Battalions and two Infantry Battalion (Mech) stored in unit sets to reduce force deployment time. The operation is based on the concept of airlifting personnel from an Army heavy Brigade and its support elements into a theater to link-up with its equipment and supplies at eh Prepositioned land site.²²

THE ROAD TO WAR

During the 12 years following DESERT STORM, the deliberate preparation for operations against Iraq focused primarily on defensive preparations in the event of a second Iraqi invasion of Kuwait, along with operation of the northern and southern no-fly zones. The U.S. led coalition maintained a presence in the region to serve as a deterrent and to confirm the continuing U.S. commitment to the Kuwaiti people. The Army maintained near-continuous presence by rotating small, battalion-size forces to Kuwait to conduct combined training with Kuwaiti and other Gulf Cooperation Council armed forces. Folded into the CENTCOM exercise INTRINSIC ACTION, these rotations served several purposes. First INTRINSIC ACTION demonstrated resolve and a continuing commitment to the defense of Kuwait and Saudi Arabia from another attack. Second, the deployed task forces exercised the Army's Brigade set (APS-5) of equipment prepositioned in Camp Doha, Kuwait.²³ Each set contained the bulk of gear required to equip a heavy brigade composed of two mechanized infantry battalions, two armor battalions, and supporting units. Although deploying units rarely used the entire set, rotational use and maintenance of the equipment ensured it would be fully mission capable when called upon.



FIGURE 1. (APS-5) PREPOSITIONED EQUIPMENT AT CAMP DOHA, KUWAIT

The importance of prepositioned stocks was dramatically illustrated during Operation Iraqi Freedom (OIF). As they faced some challenges early in the operation, the Army and Marine Corps relied heavily on prepositioned combat equipment and supplies to decisively defeat the Iraqi military. OIF demonstrated that prepositioned stocks could successfully support major combat operations.²⁴

In their planning, Marines view prepositioned stocks as their “go-to-war” gear, which minimizes surprises or last-minute adjustments. The Marines also train with their gear periodically. By contrast, the Army does not designate the sets for any particular unit and provides little training with the equipment, especially with the afloat stocks. Personnel who used and managed the equipment agreed that the tanks, infantry fighting vehicles, and howitzers were in good condition when they were drawn from the prepositioned stocks; moreover, the equipment generally stayed operational throughout the fight.²⁵ Additionally, combat personnel reported that their prepositioned equipment, in many cases, worked better than what they had at home station.

Moreover, review of operational readiness data showed that major combat equipment stayed operational, even in heavy combat across hundreds of miles. Officials from both services agreed that OIF validated the prepositioning concept and showed that it can successfully support major combat operations. Moreover, the U.S. Central Command, in an internal lessons-learned effort, concluded that prepositioned stocks “proved their worth and were critical in successfully executing OIF.”²⁶

ISSUES FACING THE PREPOSITIONING PROGRAM

NEAR TERM ISSUES

DOD faces many issues as it rebuilds its prepositioning program and plans for supporting the transformed military. Additionally, DOD faces fundamental issues as it plans the future of its prepositioning programs. As it reconstitutes the program, the Army must give priority to measures that address long-standing problems, mitigate near-term risk, and shore up readiness in key parts of its prepositioning program. These include:

- Ensuring that it has adequate equipment and spare parts and sustainment supplies in its prepositioning programs, giving priority to afloat and Korea stocks;
- Selectively modernizing equipment so that it will match unit equipment and better meet operational needs; and
- Planning and conducting training to practice drawing and using prepositioned stocks, especially afloat stocks.²⁷

Based on some contrasts in the experiences between the Army and the Marine Corps with their prepositioned equipment and supplies in OIF, benefits could be gained by establishing a closer relationship between operational units and the prepositioned stocks they would use in a contingency. The Marines practice with their stocks; the Army could likewise benefit from training on how to unload, prepare, and support prepositioned stocks, particularly afloat stocks.

LONG TERM ISSUES

The long-term issues transcend Army and Marines capabilities; they demand a coordinated effort by the DOD. Three main areas should guide the effort.

- **Determine the role of prepositioning in light of the efforts to transform the military.** Perhaps it is time for DOD to go back to the drawing board and ask: What is the military trying to achieve with these stocks? How do they fit into future operational plans? If, as indicated in Desert Storm and OIF, prepositioning continues to play an important part in meeting future military commitments, priority is needed for prepositioning as a part of transformation planning in the future.
- **Establish sound prepositioning requirements that support joint expeditionary forces.** If DOD decides that prepositioning will continue to play an important role in supporting future combat operations, establishing sound, fully integrated requirements is critical. The Department is beginning to rethink what capabilities could be needed. The Army and Marines are pursuing sea-basing ideas where prepositioning ships could serve as offshore logistics bases. The RAND Corporation recently published a report suggesting that the military consider prepositioning support equipment to help the Stryker brigade meet deployment timelines.²⁸ Such support equipment constitutes much of the weight and volume of the brigade, but a relatively small part of the costs compared to the costs of combat systems.²⁹
- **Ensure that the program is resourced commensurate with its priority and that it is affordable even as the force is transformed.** DOD must consider affordability. In the past, the drawdown of Army forces made prepositioning a practical alternative because it provided extra equipment. However, as the services' equipment is transformed and recapitalized, it may not be practical to buy enough equipment for units at home station and for prepositioning. Stocks are prepositioned to reduce response times and enable forces to meet the demands of the full spectrum, of military operations.³⁰

ARMY PREPOSITIONING (FUTURE)

Prepositioning equipment and materiel has been a key element of the Army's Strategic Mobility Triad for many years. It has been an essential component of our ability to meet the demands of our NMS. Even so the strategic mobility of the Army is constrained. This limitation is represented in terms of weight/cube and time/distance: The weight/cube of Army forces exceeds the capability of available strategic airlift to meet deployment goals.³¹ The time required to move Army forces vast distances by sea from CONUS exceeds the acceptable force closure times for early deploying forces.³²

The APS Program has served a useful purpose in mitigating this mobility dilemma. However, as the Army progresses with the Transformation process, the nature of this mobility dilemma is changing significantly. As a result, the Army must adapt its prepositioning strategy to effectively deal with these changes. The current status of APS assets is jeopardized by shortages in equipment fill, minor planned modernizations of equipment, and increasingly more expensive maintenance requirements. While some elements of the program have received increased funding (War Reserve Secondary Items for instance), the overall program has not been funded at levels to keep pace with the ongoing modernization, digitization, and transformation of Army forces. This situation is evident in the Army's decision to accept risk in legacy forces in order to invest in Objective Force capabilities. The ongoing transformation process will further exacerbate these conditions. Additionally, as the composition of the Army's combat formations include more Stryker Brigade Combat Teams (SBCT) and Objective Force Units of Action/Employment, the relative value of AOE (Army of Excellence) Heavy equipment in APS will steadily diminish. The current Army Transformation Campaign Plan assures that there will be a point when the Heavy forces are no longer supportable. The Army's prepositioning strategy must address this reality to avoid unacceptable strategic risk.

The most compelling need for change in prepositioning strategy is the requirement to adequately support emerging joint operational concepts (e.g. Rapid Decisive Operations) with Army Objective Force capabilities. Significantly, Objective Force capabilities will include legacy CS/CSS equipment for quite some time.³³ This compelling need is clearly illustrated within the broader context of Army Power Projection in the draft White Paper on Power Projection of the Transforming Army. In general terms, this document outlines the following overarching requirements for Power Projection:

- Evolve to meet the requirements for the current and projected security environment.
- Improve the national capability to respond to GWOT requirements.
- Change in concert with DOD and Joint Transformation

- Redress known limitations within current P2 capabilities
- Deliver combined arms combat power within an adaptive, prompt, and sustained framework to meet joint force requirements in terms of time, quantity, and quality.

This draft document further states that prepositioning will continue to be a valuable element of Power Projection.³⁴ However, in order to maximize its effectiveness, an adjustable prepositioning strategy has to be developed to complement the evolving Army Transformation. In light of this, a prevailing underpinning for the strategy has emerged: The composition of prepositioned assets should include more CS/CSS equipment and sustainment materiel (including Configured Loads). While eliminating heavy combat equipment does not seem like a viable alternative for the near term, there is clearly merit in pre-positioning more CS/CSS equipment. A simple comparison between the expected life cycle and utility of combat equipment verses CS/CSS equipment over the next 15 to 20 years highlights the fact that fielding status of combat systems (AOE, FXXI, Stryker, and FCS) will experience significant turbulence, while CS/CSS equipment will remain relatively stable and constant.³⁵ This is a vital strategic consideration. Other supporting factors for this strategic alternative include:

- Theater opening and distribution assets are critically needed early in a conflict (unknown geographical threat).
- Pre-positioning CS/CSS assets would significantly mitigate the risk of an operational pause between prompt response and sustained operations.
- Improved strategic mobility of future combat systems is a required performance parameter, which eliminates the need to preposition.
- Reducing the CS/CSS claims on Strategic Lift, increases the lift availability for combat systems and forces.
- Common CS/CSS equipment will be used increasingly for operations across the spectrum of operations (e.g. Humanitarian Ops, SSC, and MCO).
- Value and maintenance requirements are less costly for CS/CSS equipment than for combat systems.
- CS/CSS equipment is less subject to the rapid pace of technological change, thus, it requires less modernization over time.³⁶

From the perspective of the Joint Force Combatant Commander, eliminating heavy combat equipment sets from APS would not be prudent until the Army has achieved the demonstrated capability to rapidly deploy combat power from strategic distances. Certainly in

the near term, prepositioned combat equipment represents a formidable deterrent. It remains clear, as previously stated, that there will be a point in time when the AOE Heavy Brigade set will lose their relevance. Consideration should then be given to other potential aspects of the prepositioning strategy, such as Pre-positioning non-Stryker equipment and sustainment in Configured Loads for the SBCT; restructuring APS afloat into employable unit configurations with sustainment on a single vessel, rather than equipment sets on one vessel and sustainment on another; and restructuring APS afloat into employable unit configurations divided into separate "fleets" perhaps collocated with USMC (Maritime Prepositioning Ship (MPS)).

If the Army adopts the emerging strategic recommendation of pre-positioning more CS/CSS, planners must develop courses of action to fulfill that strategy. Affordability of the strategy must be paramount consideration. Given the significant resource requirements for the Objective Force (i.e. FCS) and current shortages of equipment, it is not likely that the Army will invest the resources to purchase additional CS/CSS equipment to preposition. Thus, the only viable course of action to fulfill the strategy is preposition equipment from on-hand assets. The preponderance of CS/CSS equipment assets in the Army is found in the Reserve Component.³⁷

The Army's strategic mobility dilemma extends into the Army Reserve, where the challenge is even more pronounced. With equipment scattered in cities and towns across the country and supporting installations sometimes several hours away, rapidly deploying that equipment is very difficult. Deploying that equipment from central CONUS in the time-frames to meet the demands of prompt and sustained operations is all but impossible. To address this challenge, the Army Reserve has developed a program called Army Reserve Logistics XXI (ARLOG XXI). This program involves a sophisticated methodology to identify minimum equipment assets required to support unit training readiness and the equipment required for war. This process has shown that about 37% (approximately \$2.5 Billion total) of current Army Reserve equipment assets can be positioned in strategic locations (including OCONUS) and made available for deploying units in a contingency.

The Chief, Army Reserve approved the ARLOG XXI program in SEP 2000 based on availability of resources. As a result, the Army Reserve is constructing a strategic storage facility in Gulfport, MS and has studied the feasibility of prepositioning assets in Europe with promising results. COMPO 1 (Active Duty) and COMPO 3 (Reserve) should integrate the strategic storage element of ARLOG XXI into the emerging pre-positioning strategy involving more CS/CSS assets. This alternative has the potential to achieve real gains in the transformation of APS in the near term. It also increases the accessibility of critical Army CS/CSS capabilities in the Reserve Component by reducing some of the major obstacles in

deploying equipment. And most importantly, it provides an affordable option to execute the APS Transformation strategy.

CONCLUSION

The importance of prepositioned stocks was dramatically illustrated during OIF. The APS Program is a combat multiplier, making the United States a credible power projection nation. Today's national security environment demands a transformation of U.S. power projection. It is clear that a fundamental change is required in the Army's pre-positioning strategy to adapt to a new strategic environment and support the transformation of military capabilities. Our current military strategy of forward presence and power projection is achievable partly through pre-positioning. The prevailing option is to increase the pre-positioning of CS/CSS assets and sustainment materiel. There is real potential to achieve this strategy through innovative combinations of programs (Active Component and Reserve Component). Certain actions in current operations may be used to aid in the implementation of some elements of the strategy.

The future of APS is still evolving. The ability of the Army to meet the sustainment demands of the Interim and Objective Force with legacy CS/CSS equipment can be significantly enhanced by APS. The value of APS has proved to be essential to mitigating the strategic risks associated with transforming the Army while at war.

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